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Dr. Barry Commoner,
Dept. of Botany,
Washington University,
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8th November, 1954.

Dear Dr. Commoner,

When I got back I found my X-ray apparatus in need of considerable repairs and I waited to get it in working order before writing to you. It is now working well, and I should be extremely grateful if you could send me some of the materials you suggested. I think we agreed that the easiest thing to start with would be your B8, with a view to getting a preparation of orientated RNA-free rods. If you ever have enough to spare, I should also very much like to look at your young RNA-rich TMV.

I am extremely grateful to you for taking so much trouble in telling me all about your work. I enjoyed my visit to your laboratory very much and was most interested in all you told me. As a result of these and other discussions I have come back with my ideas about TMV considerably clarified, particularly concerning the kind of work I should do next.

Since my return I have calculated a Fourier projection, and find that TMV apparently has a high-density shell with a radius of about 55A. (Caspar has also written to tell me that he has a similar result, though he finds a slightly smaller radius). But I don't think we need necessarily conclude that the RNA lies in this position; the heavy shell may simply be a shell of low hydration.

I hope to have a short paper ready soon on this and related subjects.

If you send me some B8, would you please let me know what precautions are necessary to prevent it from depolymerising?

Thank you again for all your help.

Yours sincerely,

Rosalind Franklin